Tire Engineering

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June 2, 2011

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
02 JUN 2011	**N/A**	**-**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Tire Engineering	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
Mohan Khabra	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER
US Army RDECOM-TARDEC 6501 E 11 Mile Rd Warren, MI 48397-5000, USA	**21879**
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
US Army RDECOM-TARDEC 6501 E 11 Mile Rd Warren, MI 48397-5000, USA	**TACOM/TARDEC/RDECOM**
	11. SPONSOR/MONITOR'S REPORT NUMBER(S) **21879**

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release, distribution unlimited

13. SUPPLEMENTARY NOTES

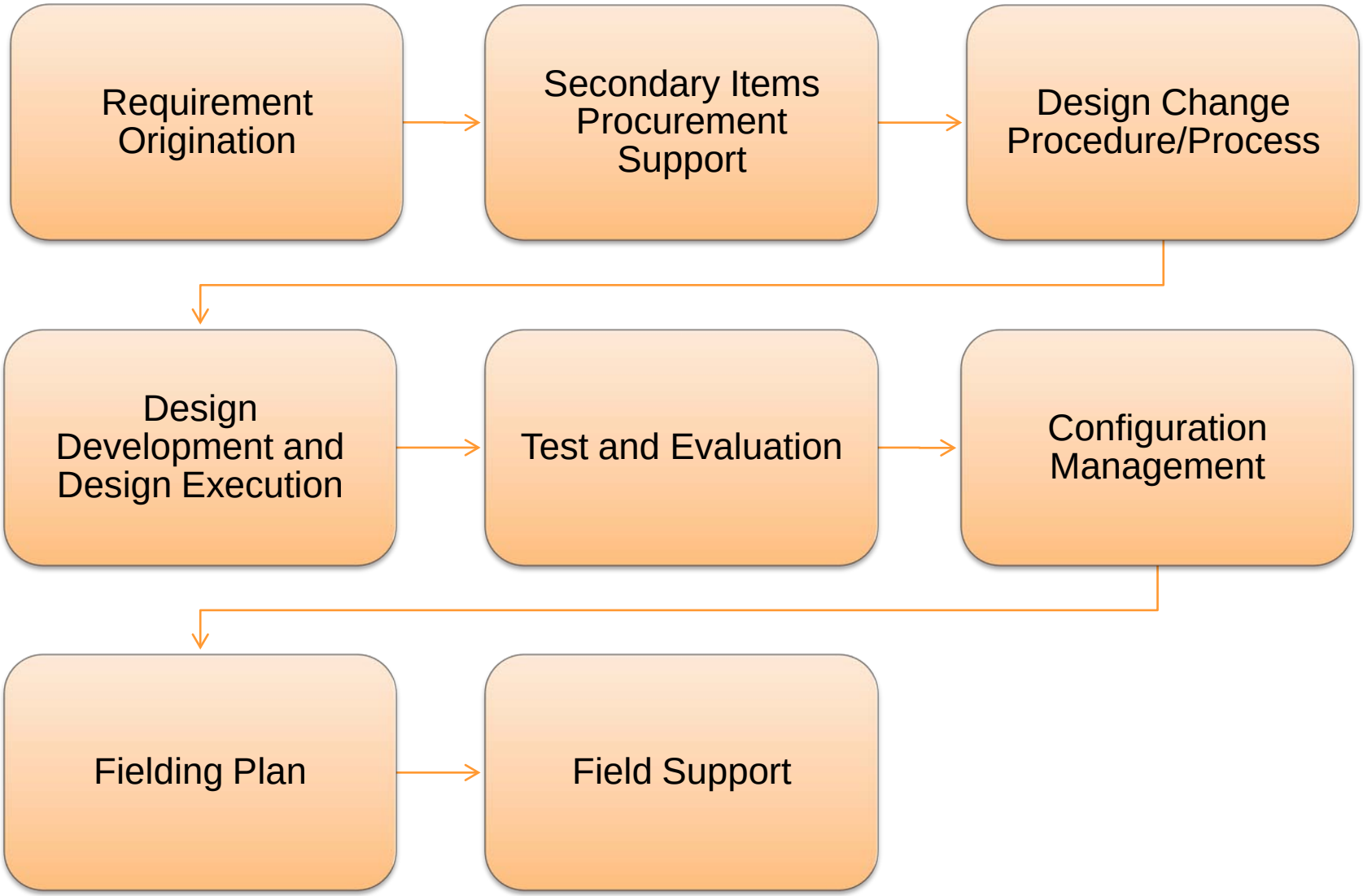
14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			
unclassified	**unclassified**	**unclassified**	**SAR**	**12**	

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18

Sustainment Engineering Change Process



Sustainment Engineering Change Process

- Requirement Origination
- Secondary Items Procurement Support
- Design Change Procedure/Process
- Design Development and Design Execution
- Test and Evaluation
- Configuration Management
- Fielding Plan and Field Support

Requirement Origination

- Secondary Items Procurement Work Directives (PWDs) Review
- Product Upgrade (Validated DA or Other Customer Requirement)
- Design Deficiency (Generated by Field Reports, PQDRs)
- Safety Improvements (Generated by Safety Center)
- DMSMS/Obsolescence (Generated by Item Manager, PM or DLA)
- Cost Savings Opportunity (Identified by Govt. or industry) OSCR and VE
- Environmental Protection Agency (EPA) Regulation

*DMSMS – Diminishing Manufacturing Sources and Material Shortages

Secondary Items Procurement Support

- Review Procurement Work Directives (PWDs)
- Prepare J&A to justify source control items
- Review TACOM 355 action to support PWDs
- Review DLA 339 action to support DLA managed item procurement
- Answer all the DLA technical inquires and field issues
- Support Quality Deficiency Report (QDR) Investigations
- Based on the above, prepare/process ECP actions

FY09 Combat/ Tactical Vehicles:

Actions	PWD	TACOM 355	DLA 339	PQDR
Number	2574	2096	1089	4000

Design Change Procedure/Process

- Use System Engineering approach to develop methodology to identify, develop & field solution
- Develop Functional Specification & Verification Plan
- Survey industry for possible solutions
- Perform Trade-off Study & Risk Analysis
- Coordinate with PSID, LCMC and establish fielding and maintenance plan
- Coordinate with TACOM Safety to assess the design
- Evaluate in-house resources to complete above
- If in-house resources are inadequate use STS/OMNIBUS contract approach

Design Development and Design Execution (In-house Effort)

- Review current design on vehicle for integration of new/revised components
- Develop proposed design (3D Model, Drawings)
- Conduct Design review and finalize model/drawings
- Build Prototype and install on the vehicle
- Perform component Lab testing if required
- Prepare vehicle for testing (Performance and Durability)

Design Development and Design Execution (Contract Effort)

- Develop Scope of Work (SOW) and request cost estimate
- Acquire funding and obligate to STS/OMNIBUS Contractor
- Guide/direct contractor to develop milestone schedule
- Monitor project output and assure SOW is being followed.
- Take delivery of Vehicles with prototype installed for testing
- Review project deliverables; Drawings, ECPs, Provisioning & Packaging Data, Quality Assurance documents and reports.

Test and Evaluation

- Develop Test Plan
- Coordinate with Army's Test Site and Review/Finalize Test Plan
- Request and Obligate Funds for Testing
- Make arrangement for Test Vehicle delivery
- Monitor Testing and review Test Incidence Reports (TIRs)
- Resolve Test issues by developing corrective action plan
- Finalize the design configuration

Configuration Management

- Upload Engineering Change Proposal (ECP); Drawings, Specs, Packaging Data, Transportation Data and Quality Assurance Provisions in ACMS Data Base
- TARDEC PLDM Team review drawings, data and coordinate with CCB members.
- Resolve technical data issues, assure all the information is complete to procure this item.
- Request CCB chair person to review and approve/disapprove.
- If approved, release TDP for procurement
- If disapproved, return ECP back with CCB comments for correction and resubmission.

Fielding Plan

- Coordinate with PM/LCMC to determine fielding strategy of new or revised item(s).
  - User, Depot, or Contractor Installation
  - Installation conducted on a mandatory basis via Maintenance Work Order (MWO), as determined by user, or by attrition
  - Provide Engineering input for Field Notifications via Safety of Use Message (SOUM), Ground Precautionary Measure (GPM), Maintenance Advisory Message (MAM), PS Magazine Article, or Equipment Improvement Record (EIR) Digest Article

Field Support

- Coordinate with PM/LCMC to determine field support requirements
  - Provide input for Technical Manual update or Technical Bulletin preparation
  - Provide support for provisioning issues
  - Determine if New/Improved Item should be repairable or consumable
  - Provide engineering support for National Maintenance Work Requirement (NMWR) developed for repair of complex items